

PROJECTED WORKS.—Advertisements have been issued for tenders, by 1st May, for the erection of a church at Gravesend; by 11th April, for the enlargement of a portion of the Central London District School, Westow-hill, Norwood; by 16th, for sundry repairs and alterations to four or five cottages at Claygate, Esher; by 16th, for painting, cleaning, and repairing houses at Hackney for the Islington Castle Market Company; by 17th, for iron roofing for the London station of the Great Northern Railway; by 16th, for putting down about 3,900 feet of new pavement, and about 900 feet of kerb, at Romsey; by a date not specified, for the building of a bridge over the river Waver, near Winton; by 5th, for the erection of a new school-room at Wellingborough; and by 10th, for making a new road from Blisworth station to join the road from Blisworth Arm to Gayton.

BRIDLINGTON CHURCH WINDOW.—The west window of this edifice, which Mr. Wailes, who should know something of windows, distinguishes as "the largest and finest perpendicular window that has been put up in England for the last 300 years," has been restored from its unsightly mass of rude masonry, and filled with stained glass, on a design supplied and executed by Mr. Wailes. The entire height of the window is 55 feet, and the width 29 feet below the transome, and 31 feet above. The nine large openings under the tracery and above the transome are each 15½ feet high, and of proportionate width, and are filled in with full-length figures as large as life, in niches, surmounted by crocketed canopies. The centre figure is that of the Saviour, holding a globe and cross. The others are the four Evangelists, St. Paul and St. Peter, the Virgin Mary with lilies, and the Lamb. The openings below the transome are each 12½ feet high and 2½ feet wide. The centre contains the figure of St. Thomas with spear. The others are decorated with angels, alternating with flowered quarries, each with a separate lily, in allusion to the dedication of the church to the Virgin Mary. The chief openings in the tracery are filled in with such symbols as the crown of thorns, spear, nails, and sponge, and the secondary and subordinate openings with angel-figures, pelican, I.H.S., &c.

A NEW OVEN.—We yesterday saw tested a new oven invented by Mr. M. Fitch, which, for despatch and economy of fuel, will be deemed a godsend by all good housewives. The furnace is a circular fire cylinder of 8½ inches diameter; the fire divides at the lower end right and left into two cylinders of 6 inches diameter, and the heat ascends at each angle of the front of the oven, and enters two deflectors, which it traverses backwards and forwards, so as to secure equal heat all over the oven. Beneath the furnace is another oven for cooking joints. We saw a bushel of bread beautifully baked, and four shoulders of mutton cooked at an expenditure of 8½ lbs. of coals, which is a fraction less than 1d.; after the heat is thus got up, the same could be done for 3d., and the oven kept in operation all day for about 3d. or 4d.—*Chelmsford Chronicle.*

MONUMENT AT RUNNYMEDE.—It appears surprising in a country like this that there should be no memorial, not even an inscription, to mark the spot at Runnymede where the Magna Charta of every Englishman's rights received the sign-manual of King John, in the twelfth century, through the firmness of the Barons. The site at present is occupied as a race-course, with an unsightly stand in the centre. Surely this might, and ought to be, removed, and an ornamental and appropriate monument or memorial be executed to commemorate the event, which might be made useful, at the same time, without interfering with the amusement of the race-course. I really think the county and the public should take some interest in such an undertaking.—*W.*

RAILWAY THROUGH THE ALPS.—M. Maus, the Sardinian engineer, has published his report on the gigantic operation of boring through the Alps in constructing the railway from Chamberg to Turin. The tunnel will be finished in five years, and the expense, including the laying down of a double line of rails, will, according to his estimate, amount to 13,000,000 francs. The French engineers calculated the cost of boring the Saint Irenée mountain at 24,000,000 francs.

BUILDERS' TENDERS.—We have before us complaints from builders in five different cases, as to the non-acceptance by committees of the lowest tender for works required to be done, and in one instance of refusing to take any of those sent in, although made by responsible men, and below in amount their own architect's estimate. In all these cases, however, the committees had specially reserved to themselves the right to refuse the lowest tender, and the builders went into the matter with their eyes open. We would, however, impress on parties who obtain tenders the fact, that estimates cost time and money, and that this should be remembered in coming to a decision. If the lowest tender be a fair one, made *bona fide* by a respectable party, it ought in justice to be accepted.

USE THE MEANS THAT ARE AT HAND.—Some artists, says a writer in the *Athenaeum*, have failed for want of a good angel, to whisper to them in the midst of their vague and colossal aspirations to do some great thing in Art, that greatness can prove itself such by concession more surely than by defiance. Out of no more genial task than the patching of plays to suit playhouse audiences did Shakespeare secure for himself an eternal reputation. The agonizers, who must needs have worlds, public, patrons, called up expressly to welcome them—and who, failing such miracle, break their hearts in despair—are, after all, but like a pigmy who has crept into a giant's armour, and who, finding that he can move the limbs of the figure with some semblance of living will and action, fancies himself a giant also.—This is worth thinking over.

PROTECTION OF INVENTIONS AT THE 1851 EXHIBITION.—The paper on "Cheapening Patents," in your last number, is a step towards agitating this question,—at least, I hope so. Perhaps you will be humane enough, also, for the sake of the humble workman—I repudiate the term poor—to throw out a hint to the prime movers of the intended exhibition in 1851, as to the absolute necessity of publishing what sort of protection they intend to hold out to inventors who are minus the means to protect themselves with 120l. patents—and whose anxiety is immense—to exhibit their inventions to the discerning world. I know three, who, with your humble servant, all Englishmen! have dared to exercise some ingenuity respecting machinery connected with manufactures, and articles of domestic use. But, Sir, one of the perfections of human reason!—i.e., the patent law—forbids us to be too communicative to each other, and, consequently, with everybody else, having very naturally a terror of the black flag before our eyes,—for of what avail are small craft against the well-equipped pirates who so abound in a trading community. How are inventors and improvers, without a sht in the locker, to steer in 1851? Might not many a good and useful thing (even though it were only suggestive of something better) be still kept in darkness for want of paternal security when realized before the public eye?—AN INVENTOR OF WAYS, WITHOUT MEANS.

THE BIRMINGHAM EXPOSITION OF 1849.—The *Art-Journal* for April says,—"The final statement of the expenditure and receipts for the fifteen weeks during which this Exposition was open to the public has been supplied to us; and we lay it at once before our readers, inasmuch as it is a curious and instructive paper, particularly when considered in reference to the projected Exposition of 1851:—

Money realized by season tickets, single admissions, and sale of catalogues	£3,076 11 0
Cost of building and fitting-up	£1,339 18 8
Gas consumed and gas fittings	231 13 11
Fire insurance on 23,000l. for 6 months	28 14 8
Printing, advertising, and catalogues	93 18 7
Carriage of goods from distant contributors	45 0 0
Attendants	482 13 5
Incidental expenses, superintendent's salary, &c.	325 11 8
	2,966 10 11
Balance	£110 3 1

GAS-LIGHT IN DWELLINGS.—This desirable system, the extensive adoption of which, together with liberal reductions of price and strict purity in the manufacture, we have long advocated, is one certain to promote the interests of companies immensely, while providing a truly lightsome and attractive home to cheer and encourage the people in the path of duty. We are gratified to observe that the importance of it is now being urged at Manchester, where a lecture was lately delivered at the Royal Institution, by Mr. D. Stone, one of whose objects was to urge its adoption. The local *Spectator* also has taken up the subject with a leading article, in an excellent spirit, on "Gas in Dwellings." In the lecture alluded to, the facilities which gas-light affords for the more proper ventilation of dwellings, and hence for the further promotion of a cheerful spirit and health in the homes of the poorer classes, were also pointed out. The chairman of the Manchester Gas Committee itself was in the chair, and, after the lecture, gave expression to an idea that has often struck us, namely, that though only a small percentage of the composition of coal be yet applicable to the manufacture of gas, the remaining elements may yet also be converted to illuminating as well as to other purposes. The hydro-carbon gas was then adverted to, and it was remarked that the limit of attainable quantity in such substances as resin alone would ever prevent their general substitution for coal in the manufacture of gas. The chairman declared, moreover, that he could not credit the statements made as to the enormous quantities of gas which Mr. White professed to be able to extract from resin.—At the Manchester gas-works the quantity of gas made in 1849 was 379,455,600 cubic feet. The smallest day consumption was 306,000 cubic feet, and the largest 2,522,000 cubic feet. The greatest day consumption of canal was 215 tons.

A NEW LOCK.—Mr. Edwin Cotterill, of Birmingham, has invented a lock, patented as the detector lock, the security of which is alleged to consist in the peculiar formation of the wards, and a radial spring operated on by a key so cut and adapted as to press unequally on the spring. The nicety observed in the cutting is said to render it impossible even for the maker to reproduce a key precisely to fit the same lock: the security consists in the impossibility of knowing where the pressure takes place, the key being of the most eccentric form, and the lock, in fact, made to fit the key, not the key to fit the lock. The variations are said to be on the scale of the millionth part of an inch. A key apparently precisely like the true one will throw out a spring called the "detector," which not only makes all the parts fast against the false key, but renders it necessary that a peculiar backward movement be made with the true key before the lock can be opened, and hence the title of "detector." Another security is afforded by the formation of the key preventing its being cast.

ST. MARTIN'S CHURCH, BIRMINGHAM.—The employment of Mr. Hardwick to furnish plans and estimates, in accordance with his recommendation to restore this church and rebuild the spire, appears to have given offence to resident architects, who regard it as an insult offered to the local talent of a town which has already proved itself capable of contributing to architectural progress.

NORTH LONDON SCHOOL OF DRAWING.—A public meeting in aid of this school is to be held, it will be seen, on Tuesday evening next, at the School-room in Southampton-street, Euston-square. We hope it will be well attended.

TENDERS

For the Grand Stand at Bedford. Mr. James Horsford, architect; opened 15th March.

Parker (of Thrapston)	£1,169
M. Hill and Son (London)	1,150
Joy (Bedford)	1,027
Cobb and Masters	999

MEETINGS OF SCIENTIFIC BODIES

To be held during the evening week.

MONDAY, April 8.—Institute of Architects, 8 p.m.

TUESDAY, April 9.—Institution of Civil Engineers, 8 p.m.

WEDNESDAY, April 10.—British Archaeological Association, 8½ p.m.

THURSDAY, April 11.—Royal Society, 8½ p.m.; Society of Antiquaries, 8 p.m.